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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/829,276	04/22/2004	Tomoki Ohkawa	Q81191	6463
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2100 PENNSYLVANIA AVE. NW			CASCHERA, ANTONIO A	
WASHINGTON, DC 20037-3213			ART UNIT	PAPER NUMBER
			2628	
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SHORTENED STATUTOR	RY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE	
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Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	Application No.	Applicant(s)	
	10/829,276	OHKAWA, TOMOKI	
Office Action Summary	Examiner	Art Unit	
	Antonio A. Caschera	2628	
The MAILING DATE of this communication appeariod for Reply	pears on the cover sheet with	the correspondence address	
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statut. Any reply received by the Office later than three months after the mailine earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNICA 136(a). In no event, however, may a repl will apply and will expire SIX (6) MONTH te, cause the application to become ABAN	ATION. by be timely filed S from the mailing date of this communication. DONED (35 U.S.C. § 133).	
Status	•		
 1) Responsive to communication(s) filed on 12 A 2a) This action is FINAL. 2b) This 3) Since this application is in condition for allowed closed in accordance with the practice under a 	s action is non-final. ance except for formal matter	·	
Disposition of Claims			
4) Claim(s) 1,3-7 and 9-12 is/are pending in the 4a) Of the above claim(s) is/are withdra 5) Claim(s) is/are allowed. 6) Claim(s) 1,3-7 and 9-12 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/o	awn from consideration.		
Application Papers			
9) The specification is objected to by the Examina 10) The drawing(s) filed on 22 April 2004 is/are: a Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the E	a) \boxtimes accepted or b) \square objected or by accepted or by abeyance of the drawing (s) the drawing (s)	e. See 37 CFR 1.85(a). is objected to. See 37 CFR 1.121(d).	
Priority under 35 U.S.C. § 119			
12) ☑ Acknowledgment is made of a claim for foreign a) ☑ All b) ☐ Some * c) ☐ None of: 1. ☑ Certified copies of the priority documen 2. ☐ Certified copies of the priority documen 3. ☐ Copies of the certified copies of the priority documen application from the International Burea * See the attached detailed Office action for a list	nts have been received. Its have been received in Apportity documents have been reau (PCT Rule 17.2(a)).	olication No eceived in this National Stage	
	•		
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date		nmary (PTO-413) Mail Date rmal Patent Application	

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. Receipt is acknowledged of a request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e) and a submission, filed on 03/12/2007.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 7, 9 and 10 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

In reference to claim 7, the language of the claims raise questions as to whether the claims (claims 7 and all dependent claims) are directed merely to an abstract idea that is not tied to a technological art, environment or machine which would result in a practical application producing a concrete, useful, and tangible result to form the basis of statutory subject matter under 35 U.S.C. 101. Specifically, the "drawing processing method…" as disclosed in claim 7, is the abstract ideas, which does not produce any tangible results. Note, although claim 7 does recite, "outputting the combined image information" such a limitation does not produce a tangible result since the outputting is not tied to a physical device, (i.e. outputting by displaying on a display device the combined image information, or outputting by storing on a computer-readable medium the combined image information). See MPEP 2106 IV (B)(1) and 2106.01 [R-

In reference to claim 10, the language of the claim raises questions as to whether the claims (claim 10 and all dependent claims) are directed merely to an abstract idea that is not tied to a technological art, environment or machine which would result in a practical application producing a concrete, useful, and tangible result to form the basis of statutory subject matter under 35 U.S.C. 101. Specifically, the "drawing processing program, causing a computer to..." as disclosed in claim 10, is the abstract idea. See MPEP 2106 IV (B)(1) and 2106.01 [R-5]. Note, the Office suggests the Applicant amend the claim language of claim 10, and any dependent claims, to read, for example, "A computer-readable medium encoded with a computer program which causes a computer to...:"

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1, 3-7, 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mizuno (U.S. Patent 6,463,183 B2) in view of Tam et al. (U.S. Patent 5,754,186).

In reference to claims 1, 7 and 10, Mizuno discloses an image data processing method and apparatus and storage medium that extracts an object from an image and combines this object with another image to obtain a combined image without deteriorating picture quality (see column 2, lines 22-27). Mizuno discloses a computer system comprising a CPU, disk drive and a display, among other elements which extracts, for example, a tennis player's racket object from

input moving image data which is stored in, possibly, the disk drive (see column 4, lines 37-39, column 5, lines 44-48 and column 6, lines 47-50). Note, the Office interprets the entire process flow shown in Figure 8 to take x amount of time with this amount of time being divided between the various steps (S1-S5) of Figure 8. In view of this along with reference to Mizuno disclosing the process flow of Figure 8 executing in a loop (see "Main Loop" of Figure 8) and Mizuno performing extraction of objects within the loop (see column 5, lines 44-48, column 6, lines 47-50 and column 7, lines 7-20), the Office believes that the "every predetermined time" of Applicant's claims is inherent in the teachings of Mizuno. This amount of time is interpreted as greater than the time from which an object is extracted from moving image data. Mizuno discloses the moving image data being in the format of an MPEG1 video format (see column 7, lines 55-58). Mizuno also discloses storing the object in memory (see column 2, lines 28-31). Mizuno discloses combining the racket object, which is extracted from moving image data, with a background image (see column 6, lines 12-16). Mizuno also discloses rendering the combined data continuously as the rendering step is located within the CPU loop structure of Figure 8 in Mizuno. Although, Mizuno discloses combining extracted object data from moving data and combining such object data with a background image, Mizuno does not explicitly disclose extracting input drawing static information from a drawn input image. Tam et al. discloses a method and apparatus for blending of first and second images loaded into corresponding VRAM buffers (see column 3, lines 57-58 of Tam et al.). Tam et al. discloses the apparatus comprising a computer system which includes a writing device such as a pen or stylus that allows the user to write on the screen of a display (see column 5, lines 36-58 and column 6, lines 47-49). Tam et al. discloses "extracting" such drawing information from memory and combining it with other

image data such as video data (see column 3, lines 61-66, column 6, lines 49-61, column 7, lines 1-36 and columns 7-8, lines 67-4). Note, the image control section, image combining section and image drawing sections of Applicant's claims are interpreted functionally equivalent to the functions performed by the CPU of Mizuno. It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the pen/stylus and video based image combining techniques of Tam et al. with the image data processing techniques of Mizuno in order to allow the viewing of real-time user interaction data along with the computer system application data on a display simultaneously creating a more user friendly environment (see column 2, lines 34-49 of Tam et al.). (further see *Response to Arguments* below)

In reference to claims 3 and 9, Mizuno and Tam et al. disclose all of the claim limitations as applied to claims 1 and 7 respectively above. The computer system of Mizuno comprises a keyboard which allows the user to capture a "screen shot" of a display by depressing the Ctrl+Shift+Print Screen buttons at the same time and therefore, the Office interprets that Mizuno inherently comprises a screen capture signal allowing the user to capture an image of screen since such a keyboard function is well known in the art (Official Notice).

In reference to claim 4, Mizuno and Tam et al. disclose all of the claim limitations as applied to claim 1 above. Mizuno discloses storing the moving image data in either a memory device, disk drive or hard drive (see column 6, lines 47-50). Mizuno also discloses a rendering section found within the CPU looping structure of Mizuno's image data processing methods, which determines whether distribution is present within the image data and based on this determination, uses original color information or produces new color information for the image data (see column 7, lines 20-35). Note, the Office interprets such color information production

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methods of Mizuno functionally equivalent to the "moving image reproducing section" of Applicant's claim.

In reference to claim 5, Mizuno and Tam et al. disclose all of the claim limitations as applied to claim 1 above. Tam et al. discloses the pen or stylus creating "strokes" which comprise of engagement and disengagement points and position data in between these points representing the tracking motion of the stylus as it moves across the screen (see column 1, lines 49-62). Note, the Office interprets such "strokes" defined in a functionally equivalent format to a vector type of Applicant's claim. Tam et al. discloses "extracting" such drawing information. "strokes," from memory and combining it with other image data such as video data (see column 3, lines 61-66, column 6, lines 49-61, column 7, lines 1-36 and columns 7-8, lines 67-4). Note, the image control section, image combining section and image drawing sections of Applicant's claims are interpreted functionally equivalent to the functions performed by the CPU of Mizuno. It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the pen/stylus and video based image combining techniques of Tam et al. with the image data processing techniques of Mizuno in order to allow the viewing of real-time user interaction data along with the computer system application data on a display simultaneously creating a more user friendly environment (see column 2, lines 34-49 of Tam et al.).

In reference to claim 6, Mizuno and Tam et al. disclose all of the claim limitations as applied to claim 5 above. Tam et al. discloses "stroke" data comprising coordinate data (see column 6, lines 49-54), width data and grayscale intensity data (see column 8, lines 16-21). Note, the Office interprets that the "points count" limitation of Applicant's claim is inherently found within the "stroke" data of Tam et al. since Tam et al. discloses the "stroke" data

comprising coordinate and width data, which the Office interprets as inherently comprising a "points count."

4. Claims 11 and 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mizuno (U.S. Patent 6,463,183 B2), Tam et al. (U.S. Patent 5,754,186) and further in view of Dempski et al. (U.S. Publication 2004/0155902 A1).

In reference to claim 11, Mizuno discloses an image data processing method and apparatus and storage medium that extracts an object from an image and combines this object with another image to obtain a combined image without deteriorating picture quality (see column 2, lines 22-27). Mizuno discloses a computer system comprising a CPU, disk drive and a display, among other elements which extracts, for example, a tennis player's racket object from input moving image data which is stored in, possibly, the disk drive (see column 4, lines 37-39, column 5, lines 44-48 and column 6, lines 47-50). Note, the Office interprets that such extraction takes place at an equivalent to rate of, "every predetermined time" as the entire image data processing method of Mizuno is implemented by the CPU executing in a loop programming structure (see Figure 8 of Mizuno) and therefore, the "every predetermined time" is interpreted as equivalent to the time taken for the CPU to perform all instructions in one iteration of the loop. Mizuno discloses the moving image data being in the format of an MPEG1 video format (see column 7, lines 55-58). Mizuno also discloses storing the object in memory (see column 2, lines 28-31). Mizuno discloses combining the racket object, which is extracted from moving image data, with a background image (see column 6, lines 12-16). Mizuno also discloses rendering the combined data continuously as the rendering step is located within the CPU loop structure of Figure 8 in Mizuno. Although, Mizuno discloses combining extracted object data

from moving data and combining such object data with a background image, Mizuno does not explicitly disclose extracting input drawing static information from a drawn input image. Tam et al. discloses a method and apparatus for blending of first and second images loaded into corresponding VRAM buffers (see column 3, lines 57-58 of Tam et al.). Tam et al. discloses the apparatus comprising a computer system which includes a writing device such as a pen or stylus that allows the user to write on the screen of a display (see column 5, lines 36-58 and column 6, lines 47-49). Tam et al. discloses "extracting" such drawing information from memory and combining it with other image data such as video data (see column 3, lines 61-66, column 6, lines 49-61, column 7, lines 1-36 and columns 7-8, lines 67-4). Note, the image control section, image combining section and image drawing sections of Applicant's claims are interpreted functionally equivalent to the functions performed by the CPU of Mizuno. It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the pen/stylus and video based image combining techniques of Tam et al. with the image data processing techniques of Mizuno in order to allow the viewing of real-time user interaction data along with the computer system application data on a display simultaneously creating a more user friendly environment (see column 2, lines 34-49 of Tam et al.). Neither Mizuno nor Tam et al. explicitly disclose their image data processing techniques within a teleconferencing environment however Dempski et al. does. Dempski et al. discloses a computer system in a teleconferencing environment for superimposing a computer-generated image onto a video image or vice versa (see paragraphs 5 and 11 of Dempski et al.). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the teleconference superimposing techniques of Dempski et al with the pen/stylus and video based

image combining techniques of Tam et al. and image data processing techniques of Mizuno in order to allow multiple users to view, manipulate, and share data in a teleconferencing environment making it easier to communicate to users in remote locations (see paragraphs 2-3 of Dempski et al.).

In reference to claim 12, Mizuno, Tam et al. and Dempski et al. disclose all of the claim limitations as applied to claim 11. The Office interprets the entire process flow shown in Figure 8 of Mizuno to take x amount of time with this amount of time being divided between the various steps (S1-S5) of Figure 8. In view of this along with reference to Mizuno disclosing the process flow of Figure 8 executing in a loop (see "Main Loop" of Figure 8) and Mizuno performing extraction of objects within the loop (see column 5, lines 44-48, column 6, lines 47-50 and column 7, lines 7-20), the Office believes that the "every predetermined time" of Applicant's claims is inherent in the teachings of Mizuno. This amount of time is interpreted as greater than the time from which an object is extracted from moving image data. (further see *Response to Arguments* below)

Response to Arguments

- 5. The cancellation of claims 2 and 8 and addition of claim 12 are noted.
- 6. Applicant's arguments filed 03/12/07 & 12/11/06 have been fully considered but they are not persuasive.

In reference to claims 1-11, Applicant argues that neither Mizuno nor Tam, either alone or in combination, discloses the limitation of, "...extracting input drawing static information from a drawn input image every predetermined time," (see pages 2-4 of Applicant's Remarks of

12/11/06). Further, Applicant believes the Office uses impermissible hindsight reasoning in its interpretation of Figure 8 of Mizuno in view of the above limitation. The Office disagrees.

More specifically, Applicant argues that, "...there is no teaching or suggestion (and it is not inherent) that a particular programming loop occurs in a predetermined amount of time (see page 3, 2nd paragraph of Applicant's Remarks of 12/11/06).

Firstly, in response to Applicant's argument that the Examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See In re McLaughlin, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

As previously explained, the Office interprets the entire process flow shown in Figure 8 to take x amount of time with this amount of time being divided between the various steps (S1-S5) of Figure 8. In view of the above and further with reference to Mizuno disclosing the process flow of Figure 8 executing in a loop (see "Main Loop" of Figure 8) and Mizuno performing extraction of objects within the loop (see column 5, lines 44-48, column 6, lines 47-50 and column 7, lines 7-20), the Office believes that the "every predetermined time" of Applicant's claims is inherent in the teachings of Mizuno. The Office makes this statement when broadly interpreting the term, "predetermined time." Although it may be possible for iterations of the programming loop in Mizuno to take different amounts of time, the extraction of a static image (i.e. the tennis player) in Mizuno is, nonetheless, still performed at each iteration (see

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Figure 8). Therefore, since extraction is performed each iteration of the loop, it can be broadly

interpreted that extraction is performed every predetermined iteration of the programming loop

in Mizuno. Therefore, the Office maintains the previous rejection based upon Mizuno, Tam and

Dempski..

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Antonio Caschera whose telephone number is (571) 272-7781.

The examiner can normally be reached Monday-Thursday and alternate Fridays between 7:00

AM and 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Kee Tung, can be reached at (571) 272-7794.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

571-273-8300 (Central Fax)

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the Technology Center 2600 Customer Service Office whose telephone

number is (571) 272-2600.

aac

4/13/07

KEE M. TUNG

SUPERVISORY PATENT EXAMINER